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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/618,291

07/11/2003

Imad Qashou

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32116 7590 02/14/2007  
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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CHICAGO, IL 60661

EXAMINER

SINGH, ARTI R

ART UNIT

PAPER NUMBER

1771

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/14/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/618,291

Applicant(s)

QASHOU ET AL.

Examiner

Ms. Arti Singh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10,11 and 13-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Response to Amendments*

1. The Examiner has carefully considered Applicant's amendments and accompanying remarks dated 10/10/06 in response to the Non-Final rejection dated 07/06/06. Applicant's amendments to the claims have been entered and at this time in the claims that are under prosecution are Claims 10, 11 and 13-28. All previously made rejections are withdrawn in light of Applicant's remarks and amendment to claims 10, 14 and newly added claims 15-28. Applicant's arguments are moot as a new ground of rejection has been set forth below.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 10, 11 and 13-28 are rejected under 35 U.S.C. 103(a) as obvious over USPN 6783562 issued to Smith in view of USPN 5589258 issued to Maddern.

4. USPN 6783562 issued to Smith discloses a nonwoven composite cleaning pad that comprises two nonwoven layers bonded together, wherein the first layer is absorbent and the second layer is abrasive in nature (abstract). The first nonwoven, which the Examiner is equating as Applicant's absorbent nonwoven layer structurally comprises hydrophilic staple fibers which may be carded and are compositionally made from polypropylene, rayon, cotton etc (column 1, lines 45-65 and column 3, lines 25-45). The basis weight of this layer is about 2.0 oz/yd<sup>2</sup> (column 2, lines 8-10).

On the opposing side of the absorbent layer there are a plurality of cavities define, which the Examiner is equating to be the same as Applicant's "pillowed regions". Thermal bonding forms this arrangement. The cavities are a result of point bonding or pattern bonding process whereby discrete bond points or zones are formed and are separated from one another by unbonded areas or zones. In one embodiment the point bonding is performed using a heated calendar roll with a diamond pattern (column 3, lines 49-60). The reference is silent as to the amount of surface area that is unbonded. Therefore, a person having ordinary skill in the art at the time the invention was made would have found it obvious to have chose a point bonding of 0.5 -12 square inches, motivated by the reasoned expectation of providing the composite which is more flexible (column 3). The cavities also add to the surface area, which creates more contact area for absorbing liquids.

The second nonwoven layer, which the Examiner is equating to Applicant's abrasive layer, is attaches to the absorbent layer by means of adhesive, or may simply be bonded without an adhesive by thermal point bonding or ultrasonic bonding (column 4, lines 5-18). The basis weight of the second nonwoven layer is at least about 2.0 oz/yd<sup>2</sup> (column 4, lines 28-30). This layer may be formed from a variety of materials, such as polyester, nylon, polypropylene or acrylic (column 4).

Although Smith does not expressively suggest the claimed property of coefficient of friction, it is reasonable to presume said property is inherent, if not obvious to the invention of Smith. Support for said assumption is found in the use of like materials i.e. two nonwoven layers compositionally, the same, having the same end use and even methodically made in the same manner. The two layers are held together by the same means, which is pattern point bonding. The burden is shifted to Applicant to prove otherwise. *In re Fitzgerald* 205 USPQ 594. In addition, the presently claimed property of coefficient of friction would

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obviously have been present once the Smith invention is provided. Note In re Best 195 USPQ at 433.

Smith teaches what is set forth above but does not disclose the average diameter of the filaments that are used. Maddern et al. who teach making nonwoven laminates comprised of synthetic yarns like polypropylene, which are pattern bonded and may be meltblown or spunbonded filaments remedy this. The filaments may be between 15 to 25 microns. Therefore a person having ordinary skill in the art at the time the invention was made would have found it obvious to use the given diameter of Maddern, as the diameter of the filaments in the composite of Smith. One would have been motivated to use such a diameter, as it would provide a composite that is lightweight. Additionally, it should be noted that this is the average diameter used in for wipes.

#### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed; and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ms. Arti Singh whose telephone number is 571-272-1483. The examiner can normally be reached on M-T 9-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Ms. Arti Singh  
Primary Examiner  
Art Unit 1771

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